

The Comparsion effect and complication of entonox and pethidine for reducing labor pain in primi -gravid women in Alavi –hosiptial Ardabil(1393-1394)

Background: The use of pain-relieving drugs during labor is now part of standard care in many countries throughout the world. Each method has its own risks and benefits, with variations in effectiveness, availability and acceptability. To assess the efficacy and safety of intramuscular pethidine as an analgesic during labor compared to those of inhaled 50% nitrous oxide (Entonox)

Materials and methods: In this clinical trial study, 100 women expected to have a natural childbirth were observed. For all the subjects commencement of spontaneous labor pain along with appropriate maternal and fetal indications for vaginal delivery were the criteria to be included in the trial. By using random numbers the subjects were randomly allocated in two groups with one group using Entonox and the other receiving 0/5 mg/kg of intramuscular injection pethidine for pain relief. Regarding the intensity of labor pain experienced by the subjects and the outcome of delivery were collected by means of questionnaires.

Results: The average pain score in Entonox and Pethidine groups respectively were 3.94 ± 1.4 and 5.6 ± 1.1 , 30 minutes after intervention ($P=0.001$), but there was not a significant difference between the severity of the pain in two groups 60 min after intervention ($p>0/05$). No significant differences were seen regarding duration and interval of uterine contractions , maternal and neonatal complications, apgar score and in the duration of the first and second stage of labor between the two studied groups ($p>0/05$). Analysis of the pooled risk differences showed that none of the side effects investigated were significantly different between two groups except for mouth dryness which was significantly higher in nitrous oxide users($p=0.044$).

Conclusions: Inhaled nitrous oxide seems to give better pain relief in the short term compared to a single dose of pethidine. While it is more convenient to administer, Entonox is also regarded to be safe both for mothers and neonates.

Key words:Entonox, labor Pain , pethidin